USGS
science for a changing world

Earthquake
Shaking

Green
Alert
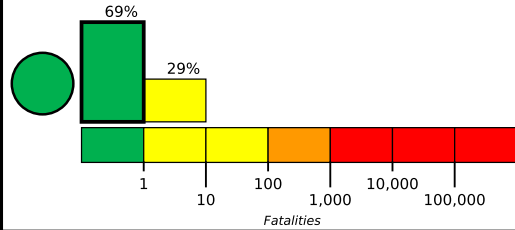
GSN
ANSS

USAID
FROM THE AMERICAN PEOPLE

M 4.3, 16 km S of Gunica, Puerto Rico

Origin Time: 2020-07-29 08:45:54 UTC (Wed 04:45:54 local)
Location: 17.8202° N 66.9084° W Depth: 10.0 km

PAGER
Version 2

Created: 21 minutes, 19 seconds after earthquake

Estimated Fatalities

69%

29%

1   10   100   1,000   10,000   100,000
Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.
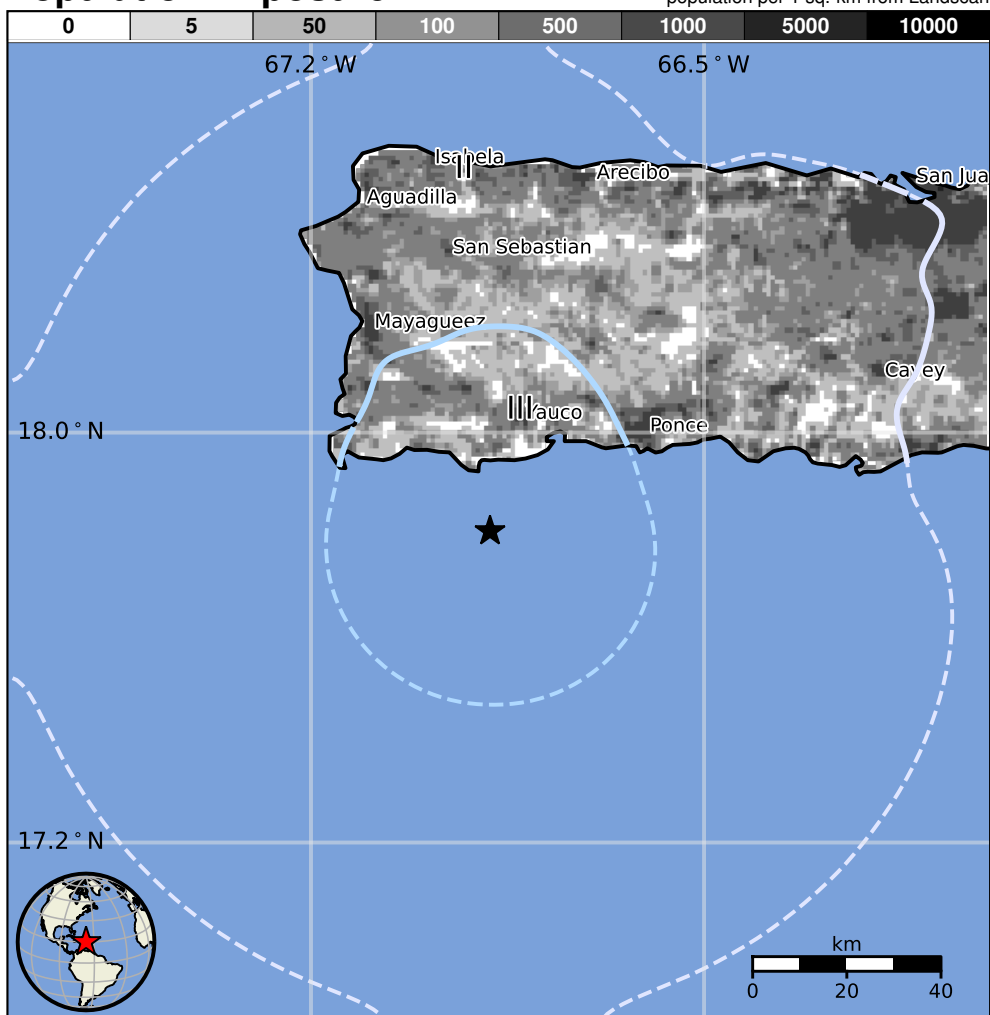
Estimated Economic Losses

65%

30%

4%

1   10   100   1,000   10,000   100,000
USD (Millions)

Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		359k*	2,502k	0	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure

population per 1 sq. km from Landscan

0	5	50	100	500	1000	5000	10000

Structures

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are mud wall and informal (metal, timber, GI etc.) construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1979-03-23	229	6.6	VI(605k)	0
1980-11-12	336	5.9	VII(87k)	–
1984-06-24	260	6.7	VII(326k)	5

Selected City Exposure

from GeoNames.org

MMI	City	Population
III	Fuig	1k
III	**Yauco**	**20k**
III	Guanica	9k
III	Palomas	2k
III	Maria Antonia	1k
III	Lluveras	2k
II	**Ponce**	**153k**
II	Bayamon	203k
II	Caguas	87k
I	Carolina	170k
I	**San Juan**	**418k**

bold cities appear on map.   (k = x1000)

Event ID: us6000b5yw